

Beddard*. In *C. celebensis* the ventral tract divides much lower down the neck, the pt. capitis is more sparse, the apt. colli lat. is (judging by the figure) more circumscribed, and, most important of all, the pt. spinalis is completely interrupted save for a few scattered feathers at the level of the junction of the coracoid and scapula, thus approximating to the arrangement of the tract in the Stage 3 nestling of *C. sinensis*. It is impossible to regard the complete spinal tract as anything but the more primitive: this condition of the tract is exhibited by the trichoptile-clad embryo and nestling (Stage 2) of *C. sinensis*, whilst the adult is intermediate between them and the insular and more modified species *C. celebensis*; it would be interesting to see what place in this series would be taken by the young of the latter species.

EXPLANATION OF PLATE XIII.

Embryo and Nestling of *Centropus sinensis*.

- A. Embryo from right side, showing the mane-like trichoptiles described on pp. 656-666.
 B. Head and neck of a nestling showing the appearance of the trichoptiles after hatching, p. 666.
 C. Nestling in which the definitive feathers are making their appearance: to show the relations of these with, and their proportions to, the trichoptile.

u = umbilicus.

t = tail.

XLIII.—On some Additional Species of Parrots of the Genus *Pyrrhura*. By T. SALVADORI.

(Plate XIV.)

THE genus *Pyrrhura*, as treated in volume xx. of the 'Catalogue of Birds,' contains 19 species, besides a doubtful one, *Pyrrhura chiripepé* (Vieill.), mentioned in the appendix. At the present moment, nearly nine years after the publication

* "On the Structural Characters and Classification of Cuckoos," P. Z. S. 1885, p. 168.

of my volume, I find that there are four species to be added to those mentioned in the 'Catalogue,' one of which requires a new name.

1. *PYRRHURA CHIRIPEPÉ* (Vieill.).

Of this species I have examined, besides a specimen obtained by Dr. Borelli at Villa Rica, in Paraguay, three others, a male and two females, from Tebicuari, not far from Villa Rica, also obtained, but quite recently, by Dr. Borelli, and two specimens, male and female, from Ypanema, in Turati's Museum, collected by Natterer.

On the receipt of the first specimen, I fully recognized that Graf von Berlepsch's surmise (Journ. f. Orn. 1887, p. 25), as to the Paraguayan bird being probably distinct from the Brazilian *P. vittata*, was quite justified, and I took the opportunity to publish a note on *Pyrrhura chiripepé* (Vieill.)*. In this note I gave the history of the species, its synonymy, a Latin description, and its probable distribution, which from Central Paraguay (Asuncion and Villa Rica) appears to extend, not only to Rio Grande do Sul, according to Graf von Berlepsch's information (Zeitschr. ges. Orn. 1885, p. 163), but also north to Ypanema, in the Province of São Paulo, as the two specimens in the Turati Museum, collected by Natterer in that locality, certainly agree with the Paraguayan ones. As to the birds obtained by Natterer at Matto dentro, Curytiba, and Itararé, also in the Province of São Paulo, it is most likely that they will be found to agree with those from Ypanema, and to belong to *P. chiripepé*.

The nearly allied *P. vittata* is confined to a more north-eastern part of Brazil, especially in the Province of Minas Geraes.

The synonymy and distribution of *Pyrrhura vittata* and of *P. chiripepé* requiring revision, I add them, according to the most recent information.

* "Intorno alla *Pyrrhura chiripepé* (Vieill.) e descrizione di una nuova specie del genere *Pyrrhura*" (Boll. Mus. Tor. n. 190, pp. 1-4, 1894).

PYRRHURA VITTATA*.

La Perruche Ara à bandeau rouge Levaill. Perr. pl. 17 (Brazil) (1801).

Psittacus vittatus Shaw (nec Bodd.), Gen. Zool. viii. 2, p. 404 (ex Levaill.) (1811); Kuhl, Consp. Psitt. p. 21 (1820); Voigt, Cuv. Das Thierreich, i. p. 726 (1831); Hahn, Orn. Atl., Papag. p. 37, t. 21 (pess.) (1834).

Psittacus frontalis Vieill. N. D. xxv. p. 361 (Guiana!) (1817); id. Enc. Méth. iii. p. 1396 (1823).

Psittacus undulatus Licht., Illig. in Mus. Berol., fide Kuhl, Consp. Psitt. p. 21 (1820); Licht. Verz. Doubl. p. 7 (Brazil) (1823); id. Nomencl. Av. p. 73 (1854).

Banded Parrot Lath. Gen. Hist. ii. p. 115 (1822).

Aratinga fasciatus Spix, Av. Bras. i. p. 35, t. xxi. ff. 1, 2 (♂ ♀, Minas Geraes et Rio de Janeiro) (1824); Steph. Gen. Zool. xiv. p. 138 (1826); Brehm, Mon. d. Papag. t. 25. ff. 1, 2.

Psittacara vittatus Vig. Zool. Journ. ii. p. 389 (1825); Steph. Gen. Zool. xiv. p. 116 (1826).

Conurus vittatus Less. Tr. d'Orn. p. 213 (1831); G. R. Gr. Gen. B. ii. p. 414, n. 23 (1845); Burm. Syst. Ueb. ii. p. 178 (part., Minas Geraes) (1856); G. R. Gr. List Psitt. Brit. Mus. p. 40 (Brazil) (1859); ScL. Cat. Am. B. p. 349, n. 2084 (Brazil) (1862); Schleg. Mus. P.-B., *Psittaci*, p. 24 (part.) (1864); Finsch, Die Papag. i. p. 530 (part.) (1867); Reinh. Vid. Meddel. 1870, p. 81 (Lagoa Santa); Pelz. Orn. Bras. pp. 259, 446, lii (part.) (1871); ScL. et Salv. Nom. Av. Neotrop. p. 112, n. 29 (part.) (1873); ? Schleg. Mus. P.-B., *Psittaci*, Revue, p. 6 (Venezuela!) (1874); Salv. Cat. B. Strickl. Coll. p. 466 (1882); ScL. List Vert. An. 8th ed. p. 344 (1883).

Psittacus infulatus Licht. fide Wied, Beitr. iv. p. 193 (1832).

Sittace vittata Wagl. Mon. Psitt. p. 641 (1832); Hartl. Syst. Verz. Ges. Mus. p. 86 (1844).

* Probably we shall have to give up the name of *P. vittata* in favour of *Pyrrhura frontalis* (Vieill.), as the name *Psittacus vittatus* Shaw (1811) is antedated by *P. vittatus* Bodd. (1783).

Microsittace vittata Bp. Rev. et Mag. de Zool. 1854, p. 150, n. 50; Souancé, Rev. et Mag. de Zool. 1856, p. 62 (part., ad.); Sousa, Mus. Nac. Lisboa, *Psittaci*, p. 9 (1869); Cab. Journ. f. Orn. 1874, p. 228 (Cantagallo).

Pyrrhura vittata Bp. Naumannia, 1856, Consp. Psitt. n. 34; Rehnw. Vogelbild. t. xxii. f. 2 (1878-83); id. Journ. f. Orn. 1881, p. 286 (Consp. Psitt. p. 174); Salvad. Cat. B. xx. p. 214 (part.) (1891); Forbes & Robins. Bull. Liverp. Mus. i. p. 12 (1897); Dubois, Syn. Av. i. p. 13, n. 161 (1899).

Hab. Eastern Brazil: Minas Geraes, Rio de Janeiro.

PYRRHURA CHIRIPEPÉ.

Chiripepé Azara, Apunt. Hist. Nat. Parag. i. p. 429, n. 281 (1803); id. Voy. (ed. Sonn.) iii. p. 65 (1809); Berl. Journ. f. Orn. 1887, p. 25.

Psittacus chiripepé Vieill. N. D. xxv. p. 361 (1817) (ex Azara); id. Enc. Méth. iii. p. 1396 (1823); Finsch, Papag. ii. 2, p. 917 (sp. dubia, descr. err.) (1868).

Chiripepé Parrakeet Lath. Gen. Hist. ii. p. 191 (1822).

Sittace chiripepé Wagl. Mon. Psitt. p. 614 (1832).

Conurus chiripepe G. R. Gr. Gen. B. ii. p. 413, n. 20 (1845); Hartl. Ind. Azara, Apunt. p. 18, n. 281 (1847); G. R. Gr. List Psitt. Brit. Mus. p. 42 (1859).

Microsittace cheripepe Bp. Rev. et Mag. de Zool. 1854, p. 150, n. 55.

Pyrrhura chiripepe Bp. Naumannia, 1856, Consp. Psitt. n. 45; G. R. Gr. Hand-list, ii. p. 149, n. 8142 (1870); Salvad. Cat. B. xx. p. 608 (sp. dubia, descr. erronea) (1891); id. Boll. Mus. Tor. n. 190, pp. 1-3 (Paraguay, Rio Grande do Sul) (1894), n. 208, p. 18 (Villa Rica) (1895); Forbes & Robins. Bull. Liverp. Mus. i. p. 12 (1897).

Conurus vittatus, Burm. Syst. Ueb. ii. p. 178 (part., São Paulo) (1856); Schleg. Mus. P.-B., *Psittaci*, p. 24 (part., Ypanema) (1864); Finsch, Die Papag. ii. p. 530 (part.) (1867); Pelz. Orn. Bras. pp. 259 (Matto dentro, Ypanema, Curytiba, Itararé), 446 (Rio Grande do Sul, São Paulo), lii (part.) (1871); Hamilt. Ibis, 1871, p. 308 (Itapetininga, São Paulo); Berl. u. Ihering, Zeitschr. f. ges. Orn. 1885, p. 163

(Rio Grande do Sul); Berl. Journ. f. Orn. 1887, pp. 25, 121 (Paraguay).

Pyrrhura vittata, part., Salvad. Cat. B. xx. p. 214 (São Paulo, Curytiba) (1891); Kerr (nec Shaw), Ibis, 1892, p. 140 (Lower Pilcomayo).

Pyrrhura vittata var. *chiripepé* Dubois, Syn. Av. i. p. 13, n. 50 (1899).

Hab. Paraguay (Asuncion, Villa Rica, Tebicuarí); N. Argentina (Lower Pilcomayo); S.E. Brazil (Rio Grande do Sul, São Paulo).

2. *PYRRHURA BORELLII*.

Pyrrhura borellii Salvad. Boll. Mus. Tor. n. 190, p. 3 (1894), n. 208, p. 18 (1895); Forbes & Robins. Bull. Liverp. Mus. i. p. 12 (1897); Dubois, Syn. Av. i. p. 13, n. 164 (1900).

Of this species I gave the following diagnosis, besides a full description:—

“*Pyrrhura P. chiripepé* simillima, sed flexura alarum rubra, collo antico et pectore magis infuscatis, remigibus primariis carumque tectricibus lætius cyanescentibus dignoscenda.”

The type specimen of *P. borellii*, a male, still unique, was obtained by Dr. Borelli at Colonia Risso, near the Rio Apa, in the Upper Paraguay, 4° N. of Villa Rica, where he met with *Pyrrhura chiripepé*.

3. *PYRRHURA HYPOXANTHA*. (Plate XIV.)

Pyrrhura hypoxantha Salvad. Boll. Mus. Tor. n. 363, p. 1 (1899).

Supra viridis, pileo fusco, cervice cyaneo tincta; genis viridibus, plumarum marginibus plus minusve flavicaulis; uropygii plumarum margine obtecto flavo; supracaudalibus viridibus, margine interno flavo, rubro tincto, extimis cyaneo tinctis; gula et collo antico albidis, hoc inferius rosaceo induto et sensim in colorem flavum gastræi, seu pectoris, abdominis tibiarumque transeunte; abdomine plaga media ruberrima ornato; plumis colli antichi linea scapali fusca notatis; plumis pectoris, abdominis tibiarumque viridi marginatis; subcaudalibus cyaneis, basi flavidis; alis viridibus, remigibus

primariis earumque tectricibus cæruleis, scapis et limbo apicali nigricantibus; pogonio externo remigis primæ ad basin albo; subalaribus flavis; margine carpalii viridi; cauda rubro-brunnea, sed rectricum basi rosacea, vel pallide rubro-corallina; rostro pedibusque obscure griseis; iride castanea; palpebris albis. Long. tot. circa 280 mm.; al. 135; caud. 140; rostri culm. 19; tarsi 11.

Hab. Matto Grosso, in sylvis prope Urucum.

Dr. Borelli obtained only two specimens of this lovely species, both females, and nearly similar, but one of them, perhaps older, with a reddish spot over the eye, and with the breast more distinctly tinged with rose-colour. Dr. Borelli saw a third specimen, but did not succeed in obtaining it. They were living in company with examples of *P. molinae*. Urucum is a place about 18 kilometres to the S.W. of Corumbá*.

4. *PYRRHURA GRISEIPECTUS*, sp. nov.

Pyrrhura leucotis Reichenow (nec Kuhl), Vogelbild. t. xxviii. f. 8 (1878-83); id. Journ. f. Orn. 1881, p. 338 (Consp. Psitt. p. 178); Salvad. Cat. B. xx. p. 216 (part.) (1891).

Viridis; pileo fusciscenti-cano; nucha cærulescente; margine frontali, regione periophthalmica et genis late rubro-castaneis; regione parotica albida, gutturis plumis canis, albido-limbatis; ventre medio rubro; flexura coccinea; uropygio et rectricibus cerasinis, his saturatoribus et ad basin viridi-limbatis; remigibus primariis in pogonio externo earumque tectricibus cæruleis; rostro nigro, pedibus carneis (*Reichenow*), in exuvie fuscis; iride crocea (*Reichenow*). Long. tot. circa 220 mm.; al. 125; caud. 135; rostri culm. 18; tarsi 12.

Hab. —?

This species belongs to the section of the genus *Pyrrhura* characterized by having on the lower back a brown-red patch, the breast with transverse bars, the cheeks maroon, and the bend of the wing red. It is allied both to *P. leucotis* (Kuhl) and *P. emma* Salvad. ex Verr., but it is easily distinguished from both by the feathers of the throat and upper

* See Boll. Soc. Geogr. Ital. x. p. 367.

breast being pure grey edged with whitish, with no tinge whatever of green or bluish colour ; moreover the grey breast is sharply defined from the green below, and there is no bluish tinge whatever on the forehead. Dr. Reichenow (*ll. cc.*) has described and figured this species under the name of *P. leucotis*. I have called his attention to the probable distinctness of the bird described by him, and he writes agreeing entirely with my conclusions, adding that the specimens in the Berlin Museum had been kept in captivity, and there is no clue to its origin. The Turin Museum possesses two specimens exactly like Dr. Reichenow's plate, both of which had been kept in confinement by Count Peracca, who received them from a dealer ; their exact locality is unknown, but I suspect that Guiana is the place where the species may be looked for.

Owing to these additions, the key to the species of the genus *Pyrrhura* printed in the 'Catalogue of Birds' must be partly altered as follows, so as to include *P. chiripepé* and the newly-described species :—

- a. A brown-red patch on the lower back.
 - a'. Breast blue, with no transverse bars 1. *cruentata*, p. 213.
 - b'. Breast with transverse bars, or scale-like appearance.
 - a''. Breast with transverse bars.
 - a'''. Cheeks and pileum green.
 - a⁴. Tail green above, more or less tinged with reddish towards the tip of the rectrices 2. *vittata*, p. 214.
 - b⁴. Tail above uniform olive-green.
 - a⁵. Bend of the wing green 3. *chiripepé*.
 - b⁵. Bend of the wing red 4. *borellii*.
 - b'''. Cheeks maroon, bend of the wing red.
 - c⁴. Fore-neck and breast bluish-green, gradually blending in the green colour of the lower parts.
 - c⁵. Pileum brown, with a very slight tinge of blue near the forehead 5. *leucotis*, p. 216.

- d*⁵. Crown brown, sinciput and nape extensively blue 6. *emma*, p. 217.
- d*⁴. Fore-neck and breast pure grey, with the edges of the feathers whitish 7. *griseipectus*.
- b*^{''}. Breast and throat with a scale-like appearance } 8. *picta*, p. 217.
9. *luciani*, p. 219.
- b*. No brown-red patch on the lower back.
- c*[']. With distinct pectoral bars.
- c*^{''}. Sides of the body and thighs yellow. 10. *hypocantha*.
11. *eyregia*, p. 221.
12. *calliptera*, p. 221.
13. *melanura*, p. 222.
14. *souancei*, p. 223.
15. *berlespchi*, p. 224.
d^{''}. Sides of the body not yellow } 16. *rupicola*, p. 224.
17. *molinæ*, p. 225.
18. *devillei*, p. 226.
19. *perlata*, p. 227.
20. *rhodogaster*, p. 229.
d[']. With no distinct pectoral bars; ear-coverts red } 21. *hamatotis*, p. 229.
22. *rhodocephala*, p. 229.
23. *hoffmanni*, p. 230.
- Turin, Zoological Museum,
June 1900.

XLIII.—*Bulletin of the British Ornithologists' Club.*

No. LXXIII. (July 3rd, 1900).

THE seventy-second Meeting of the Club was held at the Restaurant Frascati, 32 Oxford Street, on Wednesday, the 20th of June, 1900. *Chairman*: P. L. SCLATER, F.R.S. Twenty-two Members and five guests were present.

Mr. H. F. WITHERBY exhibited a male specimen of *Caprimulgus eximius* procured by him on the White Nile near Khartoum, in May 1900. So far as was known, this was the fifth example of this bird that had been procured. Three examples were obtained in 1823 or 1824 by Hey, Rüppell's collector, probably near the White Nile. Two of these were now at Frankfurt and one at Leyden (see Hartert, *Ibis*, 1892,